

Chunhui Lu

List of Publications by Year in descending order

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Version: 2024-02-01

99
papers

3,163
citations

218381

26
h-index

168136

53
g-index

104
all docs

104
docs citations

104
times ranked

2522
citing authors

#	ARTICLE	IF	CITATIONS
1	Seawater intrusion processes, investigation and management: Recent advances and future challenges. <i>Advances in Water Resources</i> , 2013, 51, 3-26.	1.7	1,046
2	Novel $\text{Fe}_2\text{O}_3/\text{MXene}$ nanocomposite as heterogeneous activator of peroxymonosulfate for the degradation of salicylic acid. <i>Journal of Hazardous Materials</i> , 2020, 382, 121064.	6.5	185
3	Steady-state freshwater-seawater mixing zone in stratified coastal aquifers. <i>Journal of Hydrology</i> , 2013, 505, 24-34.	2.3	124
4	Effects of kinetic mass transfer and transient flow conditions on widening mixing zones in coastal aquifers. <i>Water Resources Research</i> , 2009, 45, .	1.7	80
5	Timescales of seawater intrusion and retreat. <i>Advances in Water Resources</i> , 2013, 59, 39-51.	1.7	80
6	How important is the impact of land-surface inundation on seawater intrusion caused by sea-level rise?. <i>Hydrogeology Journal</i> , 2013, 21, 1673-1677.	0.9	72
7	Facile construction of dual heterojunction $\text{CoO}/\text{TiO}_2/\text{MXene}$ hybrid with efficient and stable catalytic activity for phenol degradation with peroxymonosulfate under visible light irradiation. <i>Journal of Hazardous Materials</i> , 2021, 420, 126686.	6.5	72
8	Effects of commonly used nitrification inhibitors—dicyandiamide (DCD), 3,4-dimethylpyrazole phosphate (DMPP), and nitrapyrin—on soil nitrogen dynamics and nitrifiers in three typical paddy soils. <i>Geoderma</i> , 2020, 380, 114637.	2.3	65
9	Combined effects of tides, evaporation and rainfall on the soil conditions in an intertidal creek-marsh system. <i>Advances in Water Resources</i> , 2017, 103, 1-15.	1.7	50
10	Nonlinear interactions of waves and tides in a subterranean estuary. <i>Geophysical Research Letters</i> , 2015, 42, 2277-2284.	1.5	45
11	Seawater intrusion in response to sea-level rise in a coastal aquifer with a general-head inland boundary. <i>Journal of Hydrology</i> , 2015, 522, 135-140.	2.3	42
12	Dynamics of freshwater-seawater mixing zone development in dual-domain formations. <i>Water Resources Research</i> , 2010, 46, .	1.7	40
13	A Proof-of-Concept Study of Using a Less Permeable Slice Along the Shoreline to Increase Fresh Groundwater Storage of Oceanic Islands: Analytical and Experimental Validation. <i>Water Resources Research</i> , 2019, 55, 6450-6463.	1.7	40
14	Effect of soil particle size on the corrosion behavior of natural gas pipeline. <i>Engineering Failure Analysis</i> , 2015, 58, 19-30.	1.8	39
15	Seawater intrusion and retreat in tidally-affected unconfined aquifers: Laboratory experiments and numerical simulations. <i>Advances in Water Resources</i> , 2019, 132, 103393.	1.7	39
16	Solute transport influenced by unstable flow in beach aquifers. <i>Advances in Water Resources</i> , 2019, 125, 68-81.	1.7	37
17	Effects of episodic rainfall on a subterranean estuary. <i>Water Resources Research</i> , 2017, 53, 5774-5787.	1.7	36
18	Synergistic Features of Superoxide Molecule Anchoring and Charge Transfer on Two-Dimensional $\text{Ti}_3\text{C}_2\text{T}_x$ MXene for Efficient Peroxymonosulfate Activation. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 9209-9218.	4.0	36

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19	Dewatering of drinking water treatment sludge using the Fenton-like process induced by electro-osmosis. <i>Chemical Engineering Journal</i> , 2016, 293, 207-215.	6.6	35
20	Replenishing an unconfined coastal aquifer to control seawater intrusion: Injection or infiltration?. <i>Water Resources Research</i> , 2017, 53, 4775-4786.	1.7	34
21	Effects of pipe material on nitrogen transformation, microbial communities and functional genes in raw water transportation. <i>Water Research</i> , 2018, 143, 188-197.	5.3	31
22	Molecular Characteristics of Dissolved Organic Nitrogen and Its Interaction with Microbial Communities in a Prechlorinated Raw Water Distribution System. <i>Environmental Science & Technology</i> , 2020, 54, 1484-1492.	4.6	31
23	Short-term electrochemical corrosion behavior of pipeline steel in saline sandy environments. <i>Engineering Failure Analysis</i> , 2016, 59, 410-418.	1.8	29
24	Assessment of the impact of sea-level rise on steady-state seawater intrusion in a layered coastal aquifer. <i>Journal of Hydrology</i> , 2018, 563, 851-862.	2.3	29
25	Effects of macro-pores on water flow in coastal subsurface drainage systems. <i>Advances in Water Resources</i> , 2016, 87, 56-67.	1.7	27
26	Preventing Seawater Intrusion and Enhancing Safe Extraction Using Finite-Element Length, Impermeable Subsurface Barriers: 3D Analysis. <i>Water Resources Research</i> , 2020, 56, e2020WR027792.	1.7	27
27	Simultaneous removal of dissolved organic matter and nitrate from sewage treatment plant effluents using photocatalytic membranes. <i>Water Research</i> , 2018, 143, 250-259.	5.3	26
28	Analytical solutions of seawater intrusion in sloping confined and unconfined coastal aquifers. <i>Water Resources Research</i> , 2016, 52, 6989-7004.	1.7	25
29	Boundary Condition Effects on Maximum Groundwater Withdrawal in Coastal Aquifers. <i>Ground Water</i> , 2012, 50, 386-393.	0.7	24
30	Impact of kinetic mass transfer on free convection in a porous medium. <i>Water Resources Research</i> , 2016, 52, 3637-3653.	1.7	24
31	Engineered Photocatalytic Material Membrane Assemblies for Removing Nitrate from Water. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 7042-7051.	3.2	24
32	Recovery efficiency of aquifer storage and recovery (ASR) with mass transfer limitation. <i>Water Resources Research</i> , 2011, 47, .	1.7	23
33	Maximizing Net Extraction Using an Injection-Extraction Well Pair in a Coastal Aquifer. <i>Ground Water</i> , 2013, 51, 219-228.	0.7	23
34	Threats to coastal aquifers. <i>Nature Climate Change</i> , 2013, 3, 605-605.	8.1	23
35	Defining the Effect of Stratification in Coastal Aquifers Using a New Parameter. <i>Water Resources Research</i> , 2018, 54, 5948-5957.	1.7	23
36	A comparison between ES-MDA and restart EnKF for the purpose of the simultaneous identification of a contaminant source and hydraulic conductivity. <i>Journal of Hydrology</i> , 2021, 595, 125681.	2.3	23

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37	An analytical solution for predicting the transient seepage from a subsurface drainage system. <i>Advances in Water Resources</i> , 2016, 91, 1-10.	1.7	22
38	Analytical, Experimental, and Numerical Investigation of Partially Penetrating Barriers for Expanding Island Freshwater Lenses. <i>Water Resources Research</i> , 2021, 57, e2020WR028386.	1.7	22
39	Transformation and fate of dissolved organic nitrogen in drinking water supply system: A full scale case study from Yixing, China. <i>Science of the Total Environment</i> , 2019, 673, 435-444.	3.9	21
40	Temperature Influenced the Comammox Community Composition in Drinking Water and Wastewater Treatment Plants. <i>Microbial Ecology</i> , 2021, 82, 870-884.	1.4	21
41	Measuring sustainability as distance to ideal position of economy, society and environment: Application to China's provincial water resources (2004-17). <i>Journal of Environmental Management</i> , 2021, 292, 112742.	3.8	21
42	Assessment of the impact of sea-level rise on seawater intrusion in sloping confined coastal aquifers. <i>Journal of Hydrology</i> , 2020, 586, 124872.	2.3	20
43	Groundwater pumping in head-controlled coastal systems: The role of lateral boundaries in quantifying the interface toe location and maximum pumping rate. <i>Journal of Hydrology</i> , 2014, 512, 147-156.	2.3	18
44	Predictability and Quantification of Complex Groundwater Table Dynamics Driven by Irregular Surface Water Fluctuations. <i>Water Resources Research</i> , 2018, 54, 2436-2451.	1.7	18
45	Evaluation of the performance of multiple-well hydraulic barriers on enhancing groundwater extraction in a coastal aquifer. <i>Advances in Water Resources</i> , 2020, 144, 103704.	1.7	18
46	Steady state analytical solutions for pumping in a fully bounded rectangular aquifer. <i>Water Resources Research</i> , 2015, 51, 8294-8302.	1.7	17
47	A Correction on Coastal Heads for Groundwater Flow Models. <i>Ground Water</i> , 2015, 53, 164-170.	0.7	17
48	Effects of a low-permeability layer on unstable flow pattern and land-sourced solute transport in coastal aquifers. <i>Journal of Hydrology</i> , 2021, 598, 126397.	2.3	16
49	Evaluation and application of the modified van Genuchten function for unsaturated porous media. <i>Journal of Hydrology</i> , 2019, 571, 279-287.	2.3	15
50	Effect of Anisotropy Structure on Plume Entropy and Reactive Mixing in Helical Flows. <i>Transport in Porous Media</i> , 2018, 121, 315-332.	1.2	14
51	Effects of Rate-Limited Mass Transfer on Modeling Vapor Intrusion with Aerobic Biodegradation. <i>Environmental Science & Technology</i> , 2016, 50, 9400-9406.	4.6	13
52	Variation of microbial communities and functional genes during the biofilm formation in raw water distribution systems and associated effects on the transformation of nitrogen pollutants. <i>Environmental Science and Pollution Research</i> , 2017, 24, 15347-15359.	2.7	13
53	Analysis of stagnation points for a pumping well in recharge areas. <i>Journal of Hydrology</i> , 2009, 373, 442-452.	2.3	11
54	Prediction of Environmental Properties in Water-Soil-Air Systems for Phthalates. <i>Bulletin of Environmental Contamination and Toxicology</i> , 2009, 83, 168-173.	1.3	11

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55	A mobile-mobile transport model for simulating reactive transport in connected heterogeneous fields. <i>Journal of Hydrology</i> , 2018, 560, 97-108.	2.3	11
56	A simplified equation of approximate interface profile in stratified coastal aquifers. <i>Journal of Hydrology</i> , 2020, 580, 124249.	2.3	11
57	Assessing the contribution of groundwater to catchment travel time distributions through integrating conceptual flux tracking with explicit Lagrangian particle tracking. <i>Advances in Water Resources</i> , 2021, 149, 103849.	1.7	11
58	Non-point contaminant source identification in an aquifer using the ensemble smoother with multiple data assimilation. <i>Journal of Hydrology</i> , 2022, 606, 127405.	2.3	11
59	Expanding Freshwater Lenses Adjacent to Gaining Rivers Through Vertical Low- κ Hydraulic Conductivity Barriers: Analytical and Experimental Validation. <i>Water Resources Research</i> , 2020, 56, e2019WR025750.	1.7	10
60	Effect of cut-off wall on freshwater storage in small islands considering ocean surge inundation. <i>Journal of Hydrology</i> , 2021, 603, 127143.	2.3	10
61	Solute transport in divergent radial flow with multistep pumping. <i>Water Resources Research</i> , 2012, 48, .	1.7	9
62	Role of typical soil particle size distributions on the long-term corrosion behavior of pipeline steel. <i>Materials and Corrosion - Werkstoffe Und Korrosion</i> , 2016, 67, 471-483.	0.8	9
63	Analytical analysis of the temporal asymmetry between seawater intrusion and retreat. <i>Advances in Water Resources</i> , 2018, 111, 121-131.	1.7	9
64	Hydrometeorological disasters during COVID-19: Insights from topic modeling of global aid reports. <i>Science of the Total Environment</i> , 2022, 838, 155977.	3.9	9
65	Experimental and modeling investigation of pumping from a fresh groundwater lens in an idealized strip island. <i>Journal of Hydrology</i> , 2021, 602, 126734.	2.3	8
66	A novel two-step approach for optimal groundwater remediation by coupling extreme learning machine with evolutionary hunting strategy based metaheuristics. <i>Journal of Contaminant Hydrology</i> , 2021, 243, 103864.	1.6	8
67	Shifts in the community composition of methane-cycling microorganisms during lake shrinkage. <i>Geoderma</i> , 2018, 311, 9-14.	2.3	7
68	Plume deformation, mixing, and reaction kinetics: An analysis of interacting helical flows in three-dimensional porous media. <i>Physical Review E</i> , 2020, 102, 013110.	0.8	7
69	Effects of River Partial Penetration on the Occurrence of Riparian Freshwater Lenses: Theoretical Development. <i>Water Resources Research</i> , 2020, 56, e2020WR027786.	1.7	7
70	Watable fluctuation-induced variability in the water retention curve: Sand column experiments. <i>Journal of Hydrology</i> , 2020, 589, 125125.	2.3	7
71	Effects of River Partial Penetration on the Occurrence of Riparian Freshwater Lenses: Experimental Investigation. <i>Water Resources Research</i> , 2021, 57, e2021WR029728.	1.7	7
72	Effects of Land Reclamation on a Subterranean Estuary. <i>Water Resources Research</i> , 2022, 58, .	1.7	7

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73	New finite volume multiscale finite element model for simultaneously solving groundwater flow and darcian velocity fields in porous media. <i>Journal of Hydrology</i> , 2019, 573, 592-606.	2.3	6
74	Investigation of nitrogen pollutants transformation and its pathways along the long-distance prechlorinated raw water distribution system. <i>Chemosphere</i> , 2020, 255, 126833.	4.2	6
75	Analytical and Experimental Investigation of the Impact of Land Reclamation on Steady-State Seawater Extent in Coastal Aquifers. <i>Water Resources Research</i> , 2021, 57, e2020WR029028.	1.7	6
76	Analytical Solutions for Fresh Groundwater Lenses in Small Strip Islands With Spatially Variable Recharge. <i>Water Resources Research</i> , 2021, 57, e2020WR029497.	1.7	6
77	Using nitrate as a tracer to constrain age selection preferences in catchments with strong seasonality. <i>Journal of Hydrology</i> , 2021, 603, 126889.	2.3	6
78	Development of groundwater lens for transient recharge in strip islands. <i>Journal of Hydrology</i> , 2020, 590, 125209.	2.3	5
79	Effective Chemical Delivery Through Multi-Screen Wells to Enhance Mixing and Reaction of Solute Plumes in Porous Media. <i>Water Resources Research</i> , 2021, 57, e2020WR028551.	1.7	5
80	Effects of aquifer geometry on seawater intrusion in annulus segment island aquifers. <i>Hydrology and Earth System Sciences</i> , 2021, 25, 6591-6602.	1.9	5
81	Impacts of Heterogeneity on Aquifer Storage and Recovery in Saline Aquifers. <i>Water Resources Research</i> , 2022, 58, .	1.7	5
82	Study on the role of lateral unsaturated flow in triggering slope failure under varying boundary water level conditions. <i>Advances in Water Resources</i> , 2020, 143, 103669.	1.7	4
83	Improving salt leaching efficiency of subsurface drainage systems using low-permeability surface mulch. <i>Advances in Water Resources</i> , 2022, 162, 104147.	1.7	4
84	Niche Separation of Ammonia Oxidizers in Mudflat and Agricultural Soils Along the Yangtze River, China. <i>Frontiers in Microbiology</i> , 2018, 9, 3122.	1.5	3
85	Impact of Low- or High-Permeability Inclusion on Free Convection in a Porous Medium. <i>Geofluids</i> , 2019, 2019, 1-11.	0.3	3
86	A Semianalytical Method to Fast Delineate Seawater-Freshwater Interface in Two-Dimensional Heterogeneous Coastal Aquifers. <i>Water Resources Research</i> , 2020, 56, e2020WR027197.	1.7	3
87	A novel analytical model for the transit time distributions in urban groundwater systems. <i>Journal of Hydrology</i> , 2022, 605, 127379.	2.3	3
88	An analytical approach for urban groundwater transit time distributions accounting for the effect of stormwater infiltration system. <i>Journal of Hydrology</i> , 2022, 606, 127413.	2.3	3
89	High-Dimensional Groundwater Flow Inverse Modeling by Upscaled Effective Model on Principal Components. <i>Water Resources Research</i> , 2022, 58, .	1.7	3
90	Aquifer Storage and Recovery in Layered Saline Aquifers: Importance of Layer-Arrangements. <i>Water (Switzerland)</i> , 2021, 13, 2595.	1.2	2

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91	On the intrusion and recovery of ocean-sourced ^3H and ^{14}C in coastal aquifers considering ocean-surge inundation. <i>Journal of Hydrology</i> , 2022, 604, 127241.	2.3	2
92	Approximate analytical solutions for assessing the effects of unsaturated flow on seawater extent in thin unconfined coastal aquifers. <i>Advances in Water Resources</i> , 2022, 160, 104104.	1.7	2
93	Study on Conveyance Coefficient Influenced by Momentum Exchange Under Steady and Unsteady Flows in Compound Open Channels. <i>Water Resources Management</i> , 0, , .	1.9	2
94	Comment on "Appropriate Boundary Condition for Dupuit-Boussinesq Theory on the Steady Groundwater Flow in an Unconfined Sloping Aquifer With Uniform Recharge" by Wu et al.. <i>Water Resources Research</i> , 2019, 55, 3593-3596.	1.7	1
95	New Finite Volume "Multiscale Finite-Element Model for Solving Solute Transport Problems in Porous Media. <i>Journal of Hydrologic Engineering - ASCE</i> , 2021, 26, 04021002.	0.8	1
96	On the use of modified Boussinesq equation for studying double-layered hillslope recession characteristics. <i>Journal of Hydrology</i> , 2021, 603, 127041.	2.3	1
97	Impact of a Low-Permeability Layer on the Pumping Efficiency Under Threats of Saltwater Up-Coning. <i>Frontiers in Environmental Science</i> , 0, 10, .	1.5	1
98	Reply to the comments by Willem J. Zaadnoordijk on "An analytical solution for predicting the transient seepage from a subsurface drainage system" by P. Xin, H.C. Dan, T. Zhou, C. Lu, J. Kong, L. Li [Adv. Water Resour. 91 (2016) 1-10]. <i>Advances in Water Resources</i> , 2016, 96, 440-442.	1.7	0
99	A rainfall event may produce a biased estimation of the indoor vapor intrusion risk through exterior soil-gas sampling. <i>Journal of Hydrology</i> , 2021, 603, 127117.	2.3	0